AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1-13. (Canceled).

14. (Currently Amended) A simulation system, including a processor and a computer readable medium having program code that is executable by the processor, for a computer-implemented simulation and verification of a control system under development, comprising:

an arrangement for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein the memory modules include distinct memory locations for inter-module communication, and the system modules are dynamically reconfigured with each other.

- 15. (Previously Presented) The simulation system according to claim 14, wherein a simulation is performed by running a control system simulation model, the simulation model including a number of sub-models being performed on one of the plurality of system modules, respectively.
- 16. (Previously Presented) The simulation system according to claim 14, wherein at least some of the system modules are dynamically reconfigurable for communication via distinct memory locations.
- 17. (Previously Presented) The simulation system according to claim 16, further comprising: a cross-bar switch for dynamic configuration of the distinct memory locations.
- 18. (Previously Presented) The simulation system according to claim 17, wherein the cross-bar switch comprises an interconnection scheme for coordination of the distinct memory locations.
- 19. (Previously Presented) The simulation system according to claim 14, further comprising: a host-target communication interface for connection of the simulation system with a simulation host, an input interface, and an output interface.

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- 20. (Previously Presented) The simulation system according to claim 14, wherein the modules include at least one output port server for communication interconnection with respective output port service of other modules.
- 21. (Previously Presented) A method for simulating and verifying a control system under development by a computer simulation system, comprising:

performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein inter-module communication is performed by copying signal values from one module memory location to another distinct module memory location; and

communicating between modules by a cross-bar switch for dynamic reconfiguration of the distinct memory locations.

- 22. (Canceled).
- 23. (Previously Presented) The method according to claim 21, wherein dynamic reconfiguration of the distinct memory locations is achieved according to an interconnection scheme.
- 24. (Previously Presented) The method according to claim 21, wherein inter-module communication is achieved via output port service of the various modules.
- 25. (Previously Presented) A computer readable medium having a computer program which is executable by a computer, for simulating and verifying a control system under development by a simulation system, comprising:

program code for performing a plurality of simulation processes with corresponding memory modules and interface modules, wherein inter-module communication is performed by copying signal values from one module memory location to another distinct module memory location, when the computer program is run on a computer to enable dynamic interconnection of the system modules.

26. (Canceled).